

**SUNDAY 2<sup>ND</sup> JUNE 2019**

13:30 – 14:30	<b>Student Networking Lunch</b>	
14:00 – 15:00	<b>Registration &amp; Welcome Reception</b>	
(Meta) Genomics-Enabled Natural Product Discovery <i>Nigel Mouncey</i>		
15:00 – 15:10	<b>Opening Comments</b>	
15:10 – 15:45	Jo Handelsman <i>University of Wisconsin</i>	CHEMICAL DIVERSITY FROM THE SOIL MICROBIOME
15:45 – 16:10	Nathan McGarvey <i>McMaster University</i>	
16:10 – 16:35	Nadine Ziemert <i>University of Tübingen</i>	COMPUTATIONAL GENOME MINING TOOLS FOR THE DISCOVERY OF BACTERIAL NATURAL PRODUCTS
16:35 – 17:00	Doug Mitchell <i>University of Illinois at Urbana-Champaign</i>	HIGH-THROUGHPUT RiPP DISCOVERY
17:00 – 17:15	Nigel Mouncey <i>DOE Joint Genome Institute</i>	EXPANDING THE NATURAL PRODUCTS GALAXY THROUGH METAGENOMICS
17:15 – 18:00	<b>Refreshments</b>	
18:00 – 18:25	Yi Tang <i>UCLA</i>	NATURAL PRODUCT GENOME MINING IN FUNGI
18:25 – 18:50	Marc Chevrette <i>University of Wisconsin</i>	MINING MICROBIOMES FOR ANTIMICROBIALS
18:50 – 19:05	Alison Murray <i>Desert Research Institute</i>	MICROBIOME EXPLORATIONS OF A UNIQUE MACROLIDE-PRODUCING ANTARCTIC ASCIDIAN
19:05 – 19:30	Alexander Wentzel <i>SINTEF</i>	EXPANDING THE (META)GENOMICS TOOLBOX FOR THE DISCOVERY AND PRODUCTION OF NOVEL NATURAL PRODUCTS FROM MICROBIAL RESOURCES
19:30 – 19:55	Marnix Medema <i>Wageningen University and Research</i>	COMPUTATIONAL OMICS APPROACHES TO NATURAL PRODUCT DISCOVERY
19:25 – 19:55	<b>Accompanying Guests Pre-Dinner Welcome Drinks</b>	
19:55	<b>Dinner</b>	

**MONDAY 3<sup>RD</sup> JUNE 2019**

07:00 – 08:30	<b>Buffet Breakfast at Chula Vista</b>	
Advances in Natural Product Engineering I <i>Michael Thomas</i>		
08:30 – 08:55	Dominic J. Campopiano <i>University of Edinburgh</i>	
08:55 – 09:20	Martin Grininger <i>Goethe University Frankfurt</i>	ENGINEERING FATTY ACID SYNTHASES (FASs) FOR CUSTOM COMPOUND SYNTHESIS
09:20 – 09:35	Stephan Thies <i>Heinrich-Heine-University Duesseldorf</i>	RECOMBINANT BACTERIAL CELL FACTORIES FOR DISCOVERY, TAILORING, AND PRODUCTION OF BIOSURFACTANTS
09:35 – 10:00	Alison Narayan <i>University of Michigan</i>	
10:00 – 10:45	<b>Group Photo, Refreshments &amp; Poster Viewing</b>	
10:45 – 11:10	Ikuro Abe <i>The University of Tokyo</i>	UNUSUAL ENZYME REACTIONS IN NATURAL PRODUCT BIOSYNTHESIS
11:10 – 11:25	Anna Lisa Camus <i>ETH Zurich</i>	ACCESSING BACKBONE-MODIFIED NONRIBOSOMAL PEPTIDES THROUGH ENZYME ENGINEERING
11:25 – 11:50	Alessandra Eustaquio <i>University of Illinois at Chicago</i>	
11:50 – 12:25	<b>Meet the Poster Presenters II</b> <b>Moderators: TBC</b>	
12:25 – 17:00	<b>Group Lunch &amp; Free Time</b>	
Advances in Natural Product Engineering II <i>Michael Thomas</i>		
17:00 – 17:25	Wenjun Zhang <i>UC Berkeley</i>	SYNTHETIC BIOLOGY FOR COLIBACTIN IDENTIFICATION AND CHARACTERIZATION
17:25 – 17:50	Nancy Keller <i>University of Wisconsin</i>	SECRETS TO UNLOCKING THE FUNGAL METABOLOME
17:50 – 18:15	Gavin Williams <i>North Carolina State University</i>	NEW-TO-NATURE ISOPRENOIDS AND POLYKETIDES VIA PRECURSOR-DIRECTED BIOSYNTHESIS
18:15 – 18:30	Hajo Kries <i>Leibniz-HKI</i>	BIOSYNTHETIC DESIGN OF NONRIBOSOMAL PEPTIDE BIOSYNTHESIS
18:30 – 20:15	<b>Poster Session &amp; Refreshments</b>	
20:15	<b>Dinner</b>	

**TUESDAY 4<sup>TH</sup> JUNE 2019**

07:00 – 08:30	<b>Buffet Breakfast at Chula Vista</b>	
IV Trends in the Commercialization of Natural Products <i>Charles Moore</i>		
08:30 – 08:55	Richard Baltz <i>CognoGen Biotechnology Consulting</i>	FROM COMPOST TO CAPSULES: MINING FUNGAL GENOMES FOR TRANSFORMATIVE HUMAN THERAPEUTIC
08:55 – 09:20	Elliot Miller <i>Corteva AgriScience</i>	OVERCOMING STRAIN ENGINEERING CHALLENGES TO INCREASE PRODUCTION OF UK-2A, THE PRECURSOR OF THE FUNGICIDE INATREQ™ ACTIVE
09:20 – 09:45	Daniel Gray <i>Ginkgo Bioworks</i>	HARNESSING GENOMIC INFORMATION AND SYNTHETIC BIOLOGY TO ENGINEER THE BIOSYNTHESIS OF NOVEL NATURAL PRODUCTS
09:45 – 10:10	Tyler Backman <i>Lawrence Berkeley National Laboratory</i>	COMPUTER AIDED POLYKETIDE SYNTHASE (PKS) DESIGN
10:10 – 10:55	<b>Refreshments &amp; Poster Viewing</b>	
10:55 – 11:20	Philippe Prochasson <i>LifeMine Therapeutics</i>	FROM COMPOST TO CAPSULES: MINING FUNGAL GENOMES FOR TRANSFORMATIVE HUMAN THERAPEUTIC
11:20 – 11:45	Alexandre Zanghelini <i>Arzeda</i>	
11:45 – 12:10	Guy Carter <i>Biosortia Pharmaceuticals</i>	CYANOBUFALINS: NOVEL CARDIOACTIVE TOXINS FROM CYANOBACTERIAL BLOOMS
12:10 – 12:25	Patrick Gerlinger <i>Max Planck Institute for Terrestrial Microbiology</i>	IDENTIFYING BOTTLENECKS IN AN ENGINEERED POLYKETIDE SYNTHASE
12:25 – 16:30	<b>Group Lunch &amp; Free Time</b>	
New Tools for Capturing, Manipulating and Activating Biosynthesis Pathways <i>David Mead</i>		
16:30 – 16:55	Marcus Nett <i>TU Dortmund</i>	GENETIC TOOLS FOR DIRECTING NATURAL PRODUCT BIOSYNTHESIS IN MYXOBACTERIA
16:55 – 17:20	Yousong Ding <i>University of Florida</i>	IN VIVO AND IN VITRO SYNTHETIC BIOLOGY APPROACHES TO THE PRODUCTION OF HERBICIDAL CYCLIC DIPEPTIDES
17:20 – 17:45	Anita Loeschcke <i>Heinrich Heine University Düsseldorf</i>	THE P. PUTIDA rRNA OPERONS: EXCEPTIONALLY SUITED CHROMOSOMAL SITES FOR NATURAL PRODUCT GENE CLUSTER EXPRESSION
17:45 – 18:00	Robert Stankey <i>Varigen Biosciences</i>	NEW TOOLS FOR TARGETED CLONING AND OVER EXPRESSION OF BIOSYNTHETIC GENE CLUSTERS

18:00 – 18:45	<b>Refreshments &amp; Poster Viewing</b>	
18:45 – 19:10	Michael Smanski <i>University of Minnesota</i>	DESIGNED BIOSYNTHESIS OF A NATURAL PRODUCT OF UNKNOWN ORIGIN
19:10 – 19:35	Tilmann Weber <i>Technical Univ. Denmark</i>	INTEGRATION OF INFORMATICS, METABOLIC ENGINEERING AND SYNTHETIC BIOLOGY FOR THE DISCOVERY AND ANALYSIS OF NATURAL PRODUCTS
19:35 – 20:00	Francisco Barona-Gómez <i>Cinvestav-IPN</i>	EVOLUTIONARY AND ECOLOGICAL (META) GENOME-MINING OF NATURAL PRODUCTS
20:00	<b>Gala Dinner &amp; Poster Awards</b>	

### WEDNESDAY 5<sup>TH</sup> JUNE 2019

07:00 – 09:00	<b>Buffet Breakfast at Chula Vista</b>	
Natural Biosynthetic Enzyme Structure and Activity <i>Michael Burkart</i>		
09:00 – 09:25	Martin Schmeing <i>McGill University</i>	STRUCTURES AND FUNCTIONS OF NONRIBOSOMAL PEPTIDE SYNTHETASES
09:25 – 09:50	Rebecca Goss <i>University of St. Andrews</i>	
09:50 – 10:15	Amy Lane <i>University of North Florida</i>	ASSEMBLY AND MANIPULATION OF BIOSYNTHETIC PUZZLE PIECES YIELDING DIKETOPIPERAZINE NATURAL PRODUCTS
10:15 – 10:45	<b>Refreshments</b>	
10:45 – 11:10	Sylvie Garneau-Tsodikova <i>University of Kentucky</i>	
11:10 – 11:35	Jaclyn Winter <i>University of Utah</i>	
11:35 – 12:00	Oleg Tsodikov <i>University of Kentucky</i>	
12:00 – 12:10	<b>Closing Comments</b>	